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GENERAL DISCUSSION OF INTERNATIONAL ECONOMIC AND SOCIAL POLICY INCLUDING REGIONAL AND SECTORAL DEVELOPMENTS

Proposals to improve the work of the United Nations in the early identification, analysis and forecasting of world economic developments

Report of the Secretary General

SUMMARY

1. In its resolution 1989/85 of 26 July 1989, the Economic and Social Council requested that the Secretary-General present to the Council at its second regular session of 1990 proposals that could be implemented within existing resources to improve the work of the United Nations on the early identification, analysis and monitoring of emerging problems in the world economy. In response to that request, the Secretariat reviewed various activities of the United Nations system as they relate to the analysis and forecasting of emerging global economic and social problems in the world economy and the existing information linkages which support these activities.

2. The present report reviews the role of the United Nations and presents several proposals to improve existing analytical and forecasting activities on a co-ordinated basis and to strengthen the flow of information for the analysis and forecasting of world economic developments, both within the United Nations and between the United Nations and national research units.

* E/1990/92.

3. The annex to the present report presents an overview of the activities of the main intergovernmental and inter-agency bodies concerned with co-ordinating and providing key inputs into early identification, analysis and monitoring activities. It notes the economic and social surveys and reviews prepared by agencies that provide periodic assessments of emerging developments of global concern and explore implications of possible directions of change. Modelling and forecasting activities as they relate to the early identification, analysis and monitoring of world economic developments are summarized. The compilation, processing and exchange of quantitative information and the regular meetings held among agencies to exchange information and discuss emerging economic developments are also presented.

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INTRODUCTION

1. At its second regular session of 1989, the Economic and Social Council reviewed a survey of the mechanisms and means currently available within the United Nations system for early identification, analysis and monitoring of world economic developments. 1/ The survey discussed conceptual issues and provided a summary of the systems, reports, and activities used by the United Nations system for the early identification, analysis and monitoring of emerging problems in the world economy.

2. In its resolution 1989/85 of 26 July 1989, the Council acknowledged that for the early identification of emerging problems the United Nations should aim at improving its analytical and forecasting activities on a co-ordinated basis and, to that end, requested that the Secretary-General present to the Council at its second regular session of 1990 proposals that could be implemented within existing resources to improve the work of the United Nations in this area. The Council noted that, in particular, the United Nations should strengthen information links within the United Nations; improve existing mechanisms and means of providing socio-economic data available in a comprehensive and readily available form for the use of policy makers and others; further develop links and increase the flow of information between the United Nations and national research and information centres; and expand the analysis of options and possible actions that might be taken in connection with emerging problems in the world economy, with a view to encouraging Member States to improve their own analytical work and forecasting activities.

3. In response to this request, the Secretariat reviewed activities of the United Nations system as they relate to the analysis and forecasting of emerging global economic and social problems and to the present information systems and linkages which support these activities. This survey did not include the activities of the Office of Research and the Collection of Information, which is collecting data on current political developments to assist the Secretary-General in preventing future political crises and considering the use of computerized political-economic models of the world. A preliminary draft of a review of these activities was prepared on the basis of inputs from agencies and presented to the Task Force on Long-term Development Objectives at its nineteenth session, held 26-29 March 1990. On the basis of further comments received at that meeting and additional inputs received from agencies, the preliminary draft was revised and is included as an annex to the present report. The annex summarizes these activities and, where planned, identifies improvements intended to enhance the analysis, modelling and forecasting of macro-economic and sectoral trends in the world economy. Because of the key role that comprehensive and up-to-date quantitative information plays in support of these activities, the annex also reviews the compilation and dissemination of relevant statistical data. On the basis of the review, this report presents proposals that could be implemented within existing resources to improve the work of the United Nations in the analysis and forecasting of world economic developments.

4. The capacity of the United Nations to engage in the early identification of

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emerging trends in the world economy is not, of course, unlimited. The task involves the continual monitoring of a wide range of developments in the world economy, where each agency focuses on those developments of special concern to it, and reports early signs of adverse trends or disorder, whether in the form of worsening imbalances, unfavourable demographic and ecological changes, social disruptions and political tensions, or other phenomena that may give rise to significant strains on international economic relations or threaten the possibilities for sustained and equitable world development. The efficacy of such activities depends on sensors, which may range from scientific devices and observers to the world media. The limits to this kind of activity are similar to those of warnings of natural disasters: the measure of uncertainty attached to such warnings is greater the earlier they are made, and the cost of heeding a false alarm may be very great.

5. Although early identification activities of the United Nations system frequently involve the construction of mathematical models of the world economy, they are less complicated than those used in the physical sciences, such as meteorological forecasting. However, they employ some common features. It is now recognized, for example, that unpredictability and irregularity are essential features of complex systems such as those that determine the weather. Similarly, the complexity of economic interdependencies and the prevalence of non-linear relationships set limits to the usefulness of forecasts and projections of distant changes in the world economy. These assessments of future trends are often based on the assumption of unchanged policies and also on the continuation of observed trends in technological and social change. There is a growing awareness that economic and social systems are too complex to be forecast with certainty even in the short run.

6. The complex behaviour of dynamic systems, such as the world economy, and the difficulties involved in monitoring their developments do not refute the value of efforts directed at early warning; they merely point out the need for continually improving the means and mechanisms available for this purpose.

I. ROLE OF THE UNITED NATIONS IN THE ANALYSIS AND FORECASTING OF WORLD ECONOMIC DEVELOPMENTS

7. The United Nations plays a major role in the analysis and forecasting of world economic developments, both in terms of research and policy and in terms of operational activities intended to strengthen national analysis in these areas. Research and policy activities provide the General Assembly, the Economic and Social Council and the governing bodies of agencies with a global socio-economic perspective, as well as information about the immediate prospects for developments in the wide range of areas monitored by United Nations agencies. These activities strengthen the capability of legislative and governing bodies for anticipating and responding to arising problems in the world economy. In a world of increasing interdependence, outputs of agencies are essential elements in national efforts to cope with emerging economic and social problems that may confront them. Operational activities are directed at strengthening the capacity of national authorities to monitor developments in their economy through the development of

modelling frameworks and improved information and communication systems, particularly in the area of computer system design and statistical system enhancement. A key objective at both the international and national levels is the systematic compilation, analysis and regular exchange of information relevant to the identification of short-term macro-economic disturbances and the evaluation of the implications of alternative policies on the long-term development prospects of different groups of countries.

8. In the areas mentioned above, an important role for the United Nations is the analysis and forecasting of emerging world economic developments. In order to improve co-ordination, a number of intergovernmental and inter-agency forums are devoted to discussing questions related to world economic issues, development analysis research methodologies and the compilation and exchange of relevant information. At the intergovernmental level, the Statistical Commission assists the Economic and Social Council and the Secretariat in promoting the development of national statistics and the provision of statistical services to Member States. A Working Group of the Commission is particularly concerned with issues of statistical co-ordination at the national and international levels. At the inter-agency level, the Task Force on Long-Term Development Objectives, a subsidiary body of the Administrative Committee on Co-ordination (ACC), provides a forum where agencies can discuss the world economic and social situation and its prospects and elaborate common positions on development issues and emerging problems. Its Technical Working Group meets regularly to discuss methodologies involved in the preparation of forecasts and projections of world economic activity and international trade, including the design and development of econometric models and their use by agencies. Matters related to the inter-agency co-ordination of statistical activities are discussed in the ACC Sub-Committee on Statistical Activities and its Technical Working Group on Statistical Data Bases. In a similar manner, the ACC Ad Hoc Inter-Agency Working Group on Demographic Estimates and Projections attempts to ensure that agencies use comparable sets of demographic data in their work. Finally, the Committee for Development Planning, which serves the Economic and Social Council as its advisory body on global development questions, and the Expert Group on the World Economic Outlook, which provides the Secretariat with a biannual assessment of the immediate prospects for growth in the world economy, both provide important forums for the co-ordination and exchange of information about the changing world economic situation.

9. The United Nations monitors and reports on economic and social issues and problems of global significance, it assesses their possible implications for the world economy and proposes policy measures relevant for addressing them. In carrying out this role, each agency prepares assessments of global, regional and sectoral perspectives in its area of concern. Assessments of the current situation, often issued in annual surveys and reports, have as their main purpose to alert legislative bodies and Member States about potential problems and deteriorating economic and social conditions that require immediate attention. Studies of longer-term prospects, usually issued at intervals of several years, provide an early warning about the possible effects that a continuation of observed trends may have on the world economy.

10. When monitoring the world economy, it is necessary to anticipate situations of

worsening performance and imminent change. This often involves preparing country, region and world forecasts of short-term trends in economic performance. Organizations and bodies of the United Nations system also evaluate the possible impact of alternative policies on the short- and medium-term outlook for the world economy. Finally, alternative scenarios of the longer-term evolution of the world economy under different national and international policies provide important information about the process of structural change and its implications for different groups of countries. Frequently, these prospective assessments are prepared on a co-ordinated basis among organizations and bodies and involve inputs from national research centres.

11. In support of analytical and forecasting activities, and in order to promote statistical capabilities at the national level, the United Nations gathers and evaluates economic intelligence about emerging world economic and social developments. This involves elaborating statistical standards and collecting and disseminating data about historical trends and present conditions in the world economy. This information is maintained in the computerized data banks of different agencies, and data are regularly exchanged among them for research and assessment purposes. Research and policy modelling groups examine and analyse the contents of these data banks and develop a capacity to synthesize large amounts of quantitative information analysis with the view to identifying emerging developments that warrant special attention. Several agencies have analytically integrated data systems to forecast world economic developments. They are also involved in gathering and interpreting non-quantitative information essential to a proper evaluation of the underlying reasons for the changes being observed and their possible implications for the world economy.

12. The United Nations undertakes its own analyses and facilitates research and assessment exercises at the national level. It disseminates the results of its analysis and forecasting activities and promotes standards for the exchange of data. It consults with national centres on the performance and prospects for the world economy and its main regions, and assembles from, disseminates to and exchanges relevant information with these outside units. In addition, organizations and bodies of the United Nations system promote the development of statistical, analytical and modelling capabilities at the national level through their technical co-operation activities.

II. IMPROVING ANALYTICAL AND FORECASTING ACTIVITIES ON A CO-ORDINATED BASIS

13. Organizations and bodies carry out research evaluating world, regional and sectoral economic prospects as they might evolve under alternative conditions and policy options. These activities range from the use of global models to project future world economic activity and international trade to the preparation and synthesis of judgemental evaluations of the prospective performance of countries or regions and their likely impact on the world economy. These activities are essential for evaluating the impact of alternative national and international policies on the prospects for overcoming emerging problems facing different groups of countries.

14. Global modelling and forecasting activities have been carried out throughout the United Nations system since the 1960s. A number of large-scale econometric and input-output models have been used for analyses and projections of world production and trade. Econometric modelling systems maintained by organizations and bodies enable the United Nations to monitor world economic developments and assess the possible consequences of national and international actions related to international trade, monetary policies, capital formation and saving. However, the limited ability of available models to address new problems in the areas of human resources development, technological change and the environment has led several organizations and bodies to expand existing analytical and modelling frameworks and build new models with greater sectoral detail and with an explicit and transparent representation of some micro-economic relationships within a global macro-economic structure. In the future, more attention is likely to be paid to inter-industry interactions, environmental impacts, the consequences of technology choice, the distribution of income and other social indicators. With the accumulation of quantitative and qualitative information in these areas and the help of advanced computer facilities, United Nations organizations and bodies should strengthen feedback mechanisms among existing models in order to evaluate in a consistent manner the implications of alternative scenarios. Partial and sectoral models maintained by United Nations agencies and bodies should be made to interact more closely with large-scale global models by sharing common analytical data bases and on-line access to one another's modelling environments.

15. Development problems before the world community are increasingly complex in nature as the interdependency among countries grows and economic, financial, demographic, technological and environmental trends affect countries and regions in sharply divergent ways. There is a need to adapt the existing analytical and modelling frameworks to a new set of questions and to compile wider and more timely information on current developments. It will also be necessary to study new issues within existing models and elaborate more comprehensive modelling frameworks. The assumptions and conditions under which forward-looking analyses are prepared need to be expanded to encompass a wider range of policies that might be taken in response to emerging problems.

16. Organizations and bodies are aware of the advantages of co-ordination in the area of analysis and forecasting for which a system of consultations has been elaborated. Regular discussions take place among agencies about assessments of the world economic situation and the identification of emerging problems. Organizations and bodies also regularly confer about technical problems involved in the development of analytical frameworks for modelling and forecasting world economic developments. Nevertheless, there is an evident need to strengthen these activities. Among the steps which might be taken within existing resources are the following:

Proposal 1. In order to improve the co-ordination of early identification activities, all organizations and bodies engaged in the analysis and forecasting of world developments should participate actively in the work of the ACC Task Force on Long-Term Development Objectives. Since meetings of the Task Force provide the main forum where issues, methodologies and activities related to global economic research and analysis are discussed, submission of relevant reports is strongly

recommended, and the results of these meetings should be disseminated to all units engaged in forecasting activities.

Proposal 2. The Committee for Development Planning and its working groups are the main forums where policies on international development questions are discussed by eminent individuals acting in their personal capacities as experts and advisers to the Economic and Social Council and the Secretariat. The discussions in the Committee contain frequent reference to emerging problems and the measures being taken at the national and international levels to deal with them. Agencies and units of the Secretariat should contribute to the work of the Committee, especially in those working groups which take up themes in which they have specific competence.

Proposal 3. The semi-annual meetings of the Expert Group on the World Economic Outlook (Project LINK) provide a timely forum where the immediate prospects for world economic growth are assessed and emerging global and regional economic problems are discussed. In addition to bringing together staff from the United Nations system, these meetings are also attended by prominent national forecasters and experts on the short-term world economic outlook. Discussions in this meeting and reports based on its results are key inputs into many agency assessments of the present world economic situation and its prospects. All agencies and units engaged in analysing, identifying and modelling developments in the world economy should attend these meetings and participate actively in the work of the Expert Group.

Proposal 4. The Technical Working Groups of the ACC Sub-Committee on Statistical Activities and the ACC Task Force on Long-Term Development Objectives are important forums where the technical basis of agency statistical data base and modelling activities are discussed and the consistency of data bases, forecasts and development scenarios promoted among agencies. Additional emphasis in these meetings should be given to strengthening co-operation and linkages in the areas of statistical data base systems, data base transfer mechanisms, the harmonization of analytical tools and economic models and the improvement of information systems used for economic analysis and research purposes.

Proposal 5. Increased efforts by agencies should be made to improve existing mechanisms for disseminating socio-economic forecasts and projections in a comprehensive and readily accessible form. In order to improve the exchange of analytical data, forecasts and projections produced by organizations and bodies consideration should be given to making the ACC Task Force on Long-Term Development Objectives and its secretariat the focal point for the mutual exchange among organizations and bodies of assessments of prospective developments in the economic and social field. As the focal point, the Task Force should also act as a clearinghouse for information and documentation related to global modelling and forecasting activities carried out in the United Nations system and elsewhere.

III. STRENGTHENING THE FLOW OF INFORMATION FOR THE ANALYSIS AND FORECASTING OF WORLD ECONOMIC DEVELOPMENTS

17. United Nations organizations compile, process and disseminate vast amounts of information relevant for monitoring and analysing emerging developments in the world economy. Although much of this information is not directly intended for early identification purposes, it none the less provides a quantitative basis for analysis, modelling and forecasting. More recent information on the current situation, in particular, preliminary estimates and forecasts of key variables, provide a more timely set of development indicators useful in forward-looking analyses. A main concern of organizations and bodies engaged in the analysis and forecasting of world economic developments is gaining enhanced access to this information in a readily usable form.

18. Much of the data on world economic activity, financial conditions and social developments is collected by organizations and bodies on the basis of questionnaires sent by their statistical offices to national reporting sources. These statistics are generally stored in computerized form suitable for publication. A significant amount of selection, processing and restructuring of this basic data must be undertaken to incorporate them into analytically oriented data systems. Moreover, officially reported estimates may not have the requisite timeliness and coverage for use in identifying emerging world economic problems, and agencies frequently supplement and update the basic data with other sources of information.

19. One of the problems in preparing an accurate, up-to-date and accessible data base is organizing it in such a manner that it can be retrieved, supplemented and analysed efficiently. For various reasons, each organization involved in the analysis of world economic developments has developed its own computerized data base system. For efficient exchange of data, standards and guidelines for the dissemination of statistical data would be useful. Moreover, although files of basic and analytical development indicators are regularly exchanged among organizations and bodies, it is recognized that better co-operation in information gathering and analysis is essential for strengthening the work of the United Nations system in this area. In order to strengthen the exchange of data among organizations and bodies and between the United Nations and national research institutions, the recommendations of the Working Group on Data Base Access of the Advisory Committee for the Co-ordination of Information Systems (ACCIS) on the preparation and dissemination of data should be implemented wherever feasible. 2/ In addition, the following proposal (proposal 6) in the area of information systems relevant to the analysis and forecasting of world economic developments might be considered.

Proposal 6. Within the United Nations system an increased exchange of world development indicators would improve the overall consistency and coherence of analytical and forecasting activities. Towards that end, standards and guidelines for the transfer of information among organizations and bodies should be elaborated by the Technical Working Group on Statistical Data Bases of the ACC Sub-Committee on Statistical Activities. All agencies should establish on-line access and extract facilities to their data bases. Standards and data access procedures

should be reviewed periodically to ensure that they remain consistent with advancing technological developments.

IV. INCREASING THE EXCHANGE OF INFORMATION BETWEEN THE UNITED NATIONS AND NATIONAL RESEARCH UNITS

20. The United Nations provides expertise and training at the national level to assist Member States in the monitoring of emerging developments that could adversely affect their economic and social development. Among the objectives the United Nations promotes is the strengthening of national capabilities for plan implementation and for the analysis and forecasting of the national economy and international economic environment. Technical co-operation activities supported by the United Nations encourage the introduction of advanced methods of analysis, such as econometric models and perspective planning techniques into national monitoring exercises. This includes support for modelling work as an input into the planning and policy process, preparing forecasts as part of a continuing programme for the review and appraisal of national developments, and elaborating socio-economic projections on a variety of assumptions and hypotheses in order to assist in the development of longer-range scenarios reflecting the concerns, priorities and problems of the country under study. As part of efforts directed at improving national capabilities in these areas, assistance is also given to countries to gather information needed by policy makers. Special attention is frequently given to the need to deal with problems of processing, analysing and disseminating statistics through the application of modern data processing technology.

21. It must also be noted that the analysis and forecasting work of the United Nations has been seriously hindered by deficiencies in the statistical data base underlying assessments of developments in the world economy. Basic data on national accounts and international trade - the most important sets of data for monitoring world economies developments - are years behind in their compilation, and consistent and comparable economic data on many developing countries are retarded by inadequate resources for data collection and processing and by weak international support for these activities. As a result, agencies have been forced to devote much of their analytical resources to preparing preliminary estimates and constructing their own data bases for use in monitoring and analysis.

22. There is also a need to make available to national research units information compiled by the United Nations on the state of the world economy and its immediate and longer-term prospects. At present, this involves mainly disseminating the various reports and statistical publications produced by agencies on current world economic developments. At the request of users, statistical offices and economic research units of organizations and bodies prepare statistical profiles of countries and regions for missions to the United Nations, organizations and bodies of the United Nations system and research centres of Member States. The availability of United Nations materials is made known in various publications, directories of statistical data bases and computerized listings of internal reports. In this regard, many agencies maintain mailing lists of institutions and individuals interested in their work and, through various meetings, they have an opportunity to discuss the work of the Organization with their professional

colleagues. In this connection, the Department of International Economic and Social Affairs undertook several missions in 1989 to the Economic Commission for Africa (ECA), the Economic Commission for Europe (ECE), the Economic Commission for Latin America and the Caribbean (ECLAC), the Economic and Social Commission for Asia and the Pacific (ESCAP) and the United Nations Conference on Trade and Development (UNCTAD) to assist in strengthening modelling capabilities and establishing on-line access to one another's data bases and modelling systems. These contacts also allow organizations and bodies to benefit through a discussion of work being carried out at the national level.

23. The flow of information and technical expertise to national research institutions could be improved by the following proposals:

Proposal 8. In order to improve and widen the analysis of emerging developments in the world economy and expand the analytical capabilities of United Nations organizations and Member States, organizations and bodies should make their analytical frameworks and forecasting models more accessible to interested users through the use of more advanced communication facilities, better designed user interfaces, improved documentation and, if appropriate, special training in the use of these analytical tools. National research centres interested in doing so are encouraged to establish direct on-line access to the Project LINK world model, maintained by the Department of International Economic and Social Affairs, which may be of help to them in assessing the short- and medium-term prospects of their own economies. On-line access to selected analytical files of data and forecasts at other agencies, e.g., ETS and SIGMA maintained by UNCTAD and the Economic and Social Data Base (ESD) and SEM model maintained by ECE, and at national research centres should be encouraged, subject to appropriate cost and access considerations. When framing data base access policies and practices, agencies should adopt the guidelines and standards identified by ACCIS.

Proposal 9. Agencies should establish closer relationships with other research centres, such as the United Nations University, WIDER, United Nations Institute for Training and Research (UNITAR), the United Nations Centre for Science and Technology for Development and other units, as well as with national research institutions engaged in the study of emerging economic and social developments. Efforts should be made to strengthen points of contact and information exchange through the participation of these bodies in the technical work of the Organization through invitations to meetings of Project LINK and other forums, as appropriate.

Proposal 10. Staff members engaged in the analysis and forecasting of economic and social developments should be invited to provide substantive support to the operational work of the United Nations Department of Technical Co-operation for Development and the activities of the regional commissions that are devoted to the development of national policy models.

V. EXPANDING THE ANALYSIS OF OPTIONS AND POSSIBLE ACTIONS THAT MIGHT BE TAKEN IN CONNECTION WITH EMERGING PROBLEMS IN THE WORLD ECONOMY

24. Previous sections of this report have mentioned a wide range of areas covered by early warning activities. However, an important gap exists in bringing together technology, economy and environment assessments. Because of major differences among countries in scientific and technological capabilities, there is a need to integrate technology forecasting with projections of development indicators. A higher priority should be given to global, regional and national assessments of social, economic and environmental costs and benefits of technological change and technology transfer. The various econometric models and analytical frameworks of the system contribute to this work by the provision of forecasts of key economic trends at the country and regional level and the quantitative assessment of the impact that alternative policy measures may have on world economic activity and international trade. Results from these analyses, when supplemented with judgemental assessments and other information, are included in the regular surveys and reviews of current developments, distributed to organizations and bodies and missions to the United Nations and discussed at meetings which bring together staff from different organizations and bodies and participants from various governmental agencies and national research institutions.

Proposal 11. The assessments of organizations and bodies of the immediate prospects for the world economy should be strengthened in the context of available global, sectoral and regional models. A corresponding need exists to strengthen modelling frameworks used to study the potential of the world economy over the longer term, beyond the decade of the 1990s and into the next century. Where possible, models should be designed to explicitly incorporate the impact of technological change and the availability and productivity of resources on the possibilities for economic growth. To that end, organizations and bodies should intensify their efforts at long-term global modelling as a matter of priority and should attempt to establish, within the framework of a variety of econometric models, means for the international community to explore alternative paths for world economic, environment and social developments.

Notes

1/ See World Economic Survey, 1989 (United Nations publication, Sales No. E.89.II.E.1 and corrigendum), "Special issues", sect. II.

2/ See report of the ACCIS Working Group on data base access, held at the International Labour Organisation, Geneva, 7 and 8 December 1989 (ACCIS 89/028 1989-12-12).

Annex

SURVEY OF ACTIVITIES OF THE UNITED NATIONS IN THE ANALYSIS AND FORECASTING OF WORLD ECONOMIC DEVELOPMENTS

1. This annex surveys the following five areas of activities of the United Nations system in the analysis and forecasting of world economic development: (a) co-ordination of these activities through the work of relevant bodies; (b) reporting of emerging world economic developments; (c) use of modelling frameworks by agencies to anticipate problems which might arise in the world economy; (d) existing mechanisms for the compilation of relevant information; (e) existing arrangements for the exchange of information on world economic developments.

I. INTER-AGENCY CO-ORDINATION OF THE EARLY IDENTIFICATION, MONITORING AND ANALYSIS OF WORLD ECONOMIC DEVELOPMENTS

2. This section provides an overview of activities of main intergovernmental, inter-agency and expert group bodies concerned with early identification, analysis and monitoring.

3. The Statistical Commission assists the Economic and Social Council in promoting the development of national statistics, the co-ordination of the statistical work of agencies and the development of the central statistical services of the Secretariat; advising organs of the United Nations on collection, interpretation and dissemination of statistical information; and promoting the improvement of statistics and statistical methods generally. The Statistical Commission is assisted by its Working Group on International Statistical Programmes and Co-ordination, which is particularly concerned with improving the availability of statistics at the international level.

4. Inter-agency co-ordination of global policy research, modelling and forecasting of world socio-economic developments takes place in the ACC Task Force on Long-Term Development Objectives. The Task Force provides a forum for the elaboration of common positions on questions of substance (as opposed to programmes of work). In this regard, the Task Force is particularly well suited to the exchange of information on emerging developments and to monitoring progress in the areas covered by the international development strategies. The Task Force has the role of alerting ACC to the need for the United Nations system to give attention to new issues, to study them more closely and to modify policies, priorities and work programmes in the system accordingly. The Inter-Agency Technical Working Group, which reports to the Task Force, meets regularly to discuss methodological and technical questions involved in the preparation of forecasts and long-term projections, issues in global, regional and sectoral modelling and improvements to information systems used for research purposes.

5. Among the topics discussed by the ACC Sub-Committee on Statistical Activities are the co-ordination of statistical inquiries to countries from international

organizations; policies relating to the compilation, publication and dissemination of international statistics and statistical data bases; current statistical collection activities of agencies; and co-ordination of international work on definitions, classifications and measurement. The Technical Working Group on Statistical Data Bases serves the Sub-Committee on technical questions related to accessing, transferring and producing statistical data bases. At its meetings, issues related to data base management systems, common coding systems for data transfer, and the application of new technologies are discussed. The Group is also concerned with assisting developing countries in the areas of data base development and technology application.

6. The ACC Ad Hoc Inter-Agency Working Group on Demographic Estimates and Projections co-ordinates activities related to this subject to ensure that agencies use comparable sets of demographic data in their work. The common basis for demographic assessments is the set of data published every two years by the Population Division of the Department of International Economic and Social Affairs in its World Population Prospects. The Division is currently working on the 1990 revision, and a central activity of the Group is to ensure that the underlying assumptions are consistent with those used by other agencies in their preparation of related data. In addition, co-ordination problems involved in integrating inputs from agencies into the revision process and in the further elaboration and the dissemination of demographic data are subjects for discussion.

7. The Committee for Development Planning serves as an advisory expert body on global development issues for the Economic and Social Council. The Committee provides the Council with independent expert advice on development trends and projections and a broad range of policy issues related to economic development. The Committee is frequently invited by the Council and the General Assembly to provide recommendations on important international development questions, including the identification of the least developed among the developing countries and the formulation, review and appraisal of the International Development Strategy.

8. The spring and fall meetings of the Expert Group on the World Economic Outlook (Project LINK) focus on recent trends in world economic growth and the short- and medium-term outlook for the world economy. These meetings are attended by econometricans and forecasters from Headquarters, the United Nations Conference on Trade and Development (UNCTAD), the regional commissions and specialized agencies, and national research centres and government agencies. Forecasts discussed by the Group are based on those prepared with individual country models which have been integrated into a world model. Results from the meetings represent an independent assessment of world economic prospects and provide inputs into the quarterly reviews of the global economy prepared by the Department of International Economic and Social Affairs. These reviews are circulated to Permanent Missions, United Nations Development Programme resident representatives and United Nations senior officials in the economic and social field. In addition to reviewing the world economic outlook, the fall meetings of the Expert Group focus on the construction of national econometric models.

II. REPORTS ON THE EARLY IDENTIFICATION, ANALYSIS AND MONITORING OF WORLD ECONOMIC DEVELOPMENTS

9. The economic and social surveys and reviews prepared by agencies may be considered early identification mechanisms for a wide range of problems having different time horizons. Many of these reports include global projections intended to highlight emerging developments and explore the implications of possible directions of change.

10. Reviews of the world economic situation and its prospects provide for the comprehensive assessment of progress and problems of the world economy through an analysis of past developments and an evaluation of the short-, medium- and long-term prospects in each agency's main area of concern. In addition, considerable research is undertaken evaluating the impact of alternative national and international policies. Although the reports prepared by agencies focus on different aspects of world development they are all supportive and complementary in the sense that each provides legislative and governing bodies and the international community with an independent assessment of global, regional and sectoral trends and policies.

11. The World Economic Survey provides the General Assembly with an annual assessment of world economic developments and their implications for the immediate prospects of different regions of the world. A major focus of the Survey is the identification of emerging economic issues of global concern. This involves the early identification of deteriorating economic and social situations requiring the attention of policy makers. Short-term forecasts for economic growth appearing in the Survey are based on those of Project LINK and Secretariat estimates. The annex contains up-to-date statistics for individual countries and areas of the world.

12. Socio-economic perspective reports are prepared by the Department of International Economic and Social Affairs in co-operation with other units of the United Nations in response to requests from the General Assembly and the Economic and Social Council. The reports provide comprehensive overviews of prospective developments on a wide range of issues and problems. A key focus of the reports is the elaboration of a base-line scenario showing the evolution of economic activity, international trade and social conditions under the assumption of a continuation of present trends and policies. Alternative scenarios incorporate assumptions about possible changes in policies and circumstances. These long-term scenarios are based on global models of the world economy maintained by the Department of International Economic and Social Affairs, UNCTAD and other agencies and research institutions. Historical data and projected trends are summarized in the text and statistical annexes.

13. The Trade and Development Report, prepared annually by the secretariat of UNCTAD, provides a review of recent international economic developments, together with forecasts for world economic growth. Special attention is given to the trade and development prospects of the developing countries, frequently through the use of scenario analyses. The projections, which usually cover a period of 5 to 10 years, are based on a world model encompassing macro-economic growth, trade flows disaggregated into trade in primary commodities, energy, manufacturers and

non-factor services, changes to prices and exchange rates and financial flow relationships. The reports devote attention to a selected topic of particular relevance to current development issues. Summary tables and annexes provide detailed statistics and technical information on scenario design.

14. The World Development Report prepared annually by the World Bank, reviews recent trends in the world economy and their implications for the future of the developing countries. Part II of the report deals with a specific policy-oriented theme of current relevance. When preparing its assessment of development prospects, formal models of the global economy and less formal frameworks integrating and reconciling projections prepared by regional economists with aggregate projections for important totals, such as net capital flows, world trade and debt-service payments, are used. A "base case" scenario, under the assumption the industrial countries leave their policies largely unchanged, is provided for the next 10 years. "High" and "low" case scenarios, in contrast, assume that policies would change in accordance with specified criteria. When presenting projections, reference is made to situations of successful or unsuccessful adjustment to identified problems. A comprehensive statistical annex of world development indicators is presented.

15. Work on the monitoring and analysis of global economic developments of the International Monetary Fund (IMF) appears in semi-annual issues of its World Economic Outlook, which draws on detailed analyses and judgemental projections prepared by the Fund's desk officers. The Outlook examines the functioning of the international monetary system, short-term economic prospects of the industrialized countries and the medium-term outlook for the developing countries. A base-line assessment of medium-term prospects is prepared on assumptions regarding the policy environment and key variables affecting the world economy over the next three to five years. Annexes to the Outlook include comprehensive sets of historical data and forecasts. In addition, multilateral surveillance of the current economic situation and balance-of-payments positions of member states is carried out by the IMF. These latter exercises specifically aim at monitoring and analysing global economic trends and at identifying the need for policy changes.

16. The Report on the World Social Situation, published by the United Nations every four years, contains an overview of the world social situation and regional perspectives in social development. In the preparation of the report, special emphasis is given to the relationship between national, regional and international trends and policies and to turning-points in social conditions. Considerable quantitative data relating to social conditions and progress are included in each report.

17. The United Nations Development Programme (UNDP) is preparing the Human Development Report to be issued in May 1990. The intent of the report is to provide a platform for a global dialogue and exchange of experience among countries on human development questions. The report will review the evolution of the human development concept, assess past trends, identify policy measures and discuss human development goals for the 1990s. The report will also have an annex of analytical tables. In addition, UNDP plans to issue a compendium volume of country profiles including human development, macro-economic, environmental and demographic data.

18. In some instances, the forward-looking nature of a regional review takes centre stage. For example, the Economic Survey of Latin America and the Caribbean, 1988, prepared by the Economic Commission for Latin America and the Caribbean, discussed restrictions on sustained development in Latin America and the Caribbean and suggestions for overcoming them. The 1981 and 1982 Survey identified, before the seriousness of these trends became evident elsewhere, the impending crisis of slow growth, external debt, inflation, unemployment and transfer of resources. Subsequent issues focused on the mounting debt problem and its consequences.

19. Similarly, in the early 1980s, the Economic and Social Survey of Asia and the Pacific became concerned with the effects of the world-wide recession, rising unemployment and growing inflation. The 1981 Survey warned that certain constraints to development, such as food supplies, energy resources and means for paying for imports, were critical and must be carefully taken into account if growth was to continue in the region. By 1983, rising imbalances in the external accounts of a number of large economies also became a major concern. In this respect, the Survey was used as an "early warning" instrument for countries of the region about these possible eventualities.

20. Persistent slow growth, a prolonged drought, the debt problem, social development, deteriorating terms of trade and structural adjustment were among the chronic and emerging problems monitored during the 1980s by the Economic Commission for Africa in its Survey of Economic and Social Conditions in Africa. In the 1982-1983 Survey, as an example, attention was focused on the adjustment problems in Africa. The Survey argued that in most of Africa it would be very difficult to employ monetary policy instruments because of the undeveloped financial systems in the region. In the 1983-1984 Survey, the impact of devaluation on African economies was assessed. The 1984-1985 Survey warned of the continuing food shortages, despite a bumper crop.

21. The Survey of Economic and Social Developments in the Region of the Economic and Social Commmission for Western Asia is concerned with the impact of events outside the region on the countries within the region. Hence, global economic performance and the demand for oil are two main subjects selected for analysis in the ESCWA Survey. In addition, other important development concerns, such as inflation, exchange rates, protectionism and trade policies, social development and external debt, appear regularly in the Survey. The demand for oil and oil prices are carefully monitored. The 1983 Survey, for example, stressed the danger of an oil price war. In this sense, the Survey was acting like an early warning device and may have helped to avert a more serious deflation of oil prices.

22. Tight monetary policies, trends in productivity growth and external imbalances have all been discussed in the Economic Survey of Europe. This Survey has warned of the danger of a recessionary process being precipitated by a number of possible developments, such as a fall in the exchange rate for the United States dollar, a financial crisis, a further aggravation of the external debt crisis of developing countries or a surge of protectionism which could lead to a contraction of world trade. The Survey is also concerned with social development, the impact of technological change and the process of global economic integration, and acts as a barometer of arising economic and social concerns. The Economic Commission for

Europe's Survey is also an important source of data and analysis of the rapidly changing economic developments in Eastern Europe and the Soviet Union.

23. The Food and Agriculture Organization of the United Nations (FAO) is engaged in the continuous monitoring and forecasting of trends in agriculture, fisheries, forestry, rural development and nutrition. Analyses of developments in these areas can be found in the annual report on the State of Food and Agriculture, as well as in special studies prepared on a regular basis. Among the reports currently under preparation are the Third Progress Report on the Implementation of the Programme of Action of the World Conference on Agrarian Reform and Rural Development, the World Food Survey, the report on commodity projections and a revision of the study World Agriculture Towards 2000.

24. The annual UNIDO Industry and Development Global Report reviews current trends in the world economy emphasizing the near and medium-term prospects for industrialization in developing countries. Short-term forecasts of economic activity by 28 industries presented for 140 countries explore the implications of macro-economic changes on industrial development at the national and international levels. The report also contains an in-depth assessment of industrial progress in major world regions. Each year several industrial sectors are selected for detailed analysis and selected topics of current interest for industrial development are reviewed. Country data on manufacturing value added by sector, gross national product, productivity and profitability are presented in a statistical annex.

25. The Review of International Trade, prepared annually by the General Agreement on Tariffs and Trade (GATT) secretariat, monitors trends in world trade by products, regions and individual countries. Longer-term trade developments in a specific sector or region are also analysed in depth - for example, the latest issue provides an analysis of world trade in services. The Review always addresses specific trade policy issues. Detailed information on world trade developments is provided.

26. The impact that divergent trends in the world economy have had on the lives of children in developing countries are the focus of the United Nations Children's Fund (UNICEF) reports entitled The State of the World's Children. While noting that the achievements of the 1980s in many developing countries have been remarkable and that major child health programmes have saved the lives of millions of children, continued stagnation and setbacks mean that many more millions will die during this decade unless illnesses and malnutrition are prevented by relatively low-cost methods. The 1990 report notes that significant reductions in military spending would make it possible to give new priority to the well-being of the world's children. The reports also contain a wide range of data relating to the state of the world's children.

27. The United Nations Environment Programme (UNEP) assessments of various environmental parameters are published in Reports on the Global Environmental Situation. The Global Environmental Monitoring System (GEMS) works closely with the World Meteorological Organization (WMO), the United Nations Disaster Relief Organization (UNDRO), FAO and other bodies of the United Nations system to obtain

information on the environment and disseminate it to users. Major annual publications are the Environment Data Report, prepared by UNEP in collaboration with the World Resources Institute and the British Department of the Environment and the World Resources Report, prepared by World Resources Institute in collaboration with UNEP and the IIED. The former provides serialized data on environmental pollution and natural resources, while the latter provides assessments and data on major environmental challenges and issues.

28. The Centre for Science and Technology for Development has developed the Advance Technology Alert System (ATAS) programme, which alerts policy makers and planners, especially in developing countries, on the effects and implications of new and emerging technologies. The ATAS Technology Assessment Network and the ATAS Bulletin serve the international community as a means of early identification of scientific and technological developments and to integrate them in forecasting and development planning.

III. THE ANALYSIS AND FORECASTING OF WORLD ECONOMIC DEVELOPMENTS

29. A number of the assessments of emerging world economic developments prepared by the United Nations and the specialized agencies utilize formalized quantitative models supported by relevant indicators. Short-term forecasts assume a prominent place in the major reports of agencies and form the basis for discussions of emerging problems and feasible policies. Similarly, projections over a period of about five years are the basis on which impacts of alternative policies on the medium-term outlook for world growth and trade are evaluated. Finally, agencies examine alternative scenarios of the longer-term evolution of the world economy in order to assess implications of national and international policies for development in the developing countries. Consequently, forecasts and projections of world economic activity and its detail affect not only the discussion on current world economic prospects but also the debate about appropriate policies for overcoming current world economic problems and promoting development in the developing countries.

30. Global modelling activities carried out by The Department of International Economic and Social Affairs provide a quantitative framework for preparing projections of world production and trade in connection with an analysis of the national and international policy requirements of development objectives relevant to the deliberations of the General Assembly and Economic and Social Council and which may also be of use to national planners. Several long-term global models have also been developed which focus on changes in the level and pattern of economic activity and international trade.

31. There is an equal need for the Department to monitor current trends in world economic activity and forecast the probable course of this activity in the short and medium term, including the capacity to analyse the possible consequences of immediate policy measures over a period of five years or more. In order to enhance capabilities in this area, the Department has recently increased its involvement in Project LINK and global input-output modelling, which are briefly described below.

32. Project LINK is a co-operative, international research effort for which the Department now provides central supporting services, including the quarterly preparation of forecasts. The project integrates 79 independently developed national and regional econometric models into a world model used for forecasting world economic activity and international trade. The LINK model also includes sub-models for trade flows, exchange rates and commodity prices. This model is the key framework used by the Department to monitor and forecast world economic activity in the short- and medium-term and to analyse the transmission of shocks in the world economy. It is also used for studying the possible consequences of alternative macro-economic policy measures. The results of such analyses have been used in the preparation of the Socio-Economic Perspective Reports, the World Economic Survey, and reports of the Committee for Development Planning.

33. The original version of the United Nations Global Input-Output Model, which was developed by a team of economists in the 1970s led by Professor Wassily Leontief, is presently being redesigned and updated at New York University. The model will provide the Secretariat with a comprehensive framework for studying long-term environmental trends and their relationship to problems of economic development and structural change. An analysis of alternative scenarios will allow for consideration of the impact that different policies and technological developments may have on the evolution of the world economy and its environment over a period of many decades. The Model encompasses data for 15 world regions, 45 sectors of production and a large number of relationships between economic activity, international trade and environment. Results of studies undertaken with the model are expected to enrich the Department's analyses for intergovernmental deliberations and provide policy makers with important information about global environmental trends and their implications for national development. When operational, the model will be transferred to the Department.

34. The Global Econometric Model (GEM) of the Department provides a framework for long-term projections of macro-economic trends, for the investigation of the feasibility of specific goals and targets and for the assessment of the effects of policy measures on the course of world economic growth and international trade. The model allows measurement of the extent of divergence over time among trends in economic activity and international trade that must be mutually consistent in order to generate sustained economic growth. GEM is supported by a data bank, the national accounts, trade flows and demographic characteristics of over 125 individual countries. GEM has been instrumental in the preparation of guidelines and key elements in the international development strategies, as well as the elaboration of the scenarios for the socio-economic perspective reports.

35. UNCTAD has developed a world model, supported by the System for Interlinked Global Modelling and Analysis (SIGMA), which is used in forecasting and projection activities. The SIGMA system consists of a sophisticated software package designed to handle interlinked global models in a flexible and efficient manner. The system presently comprises 58 macro-economic models for countries and regions, linked by systems of trade flows, financial flows and international trade prices that ensure global consistency. In the approach used by SIGMA, new sectoral and regional models can be added, old models deleted and alternative specifications estimated in an easy-to-use software environment. Modelling results produced with SIGMA have

been included in the Trade and Development Report and other reports. SIGMA has recently been enhanced by the development of a country intelligence system allowing on-line interactive access to the historical data used to calibrate the system.

36. The World Bank prepares annual long-run projections of world economic activity and international trade. While the nature of the projections exercises has varied from year to year, in general, a "base case" scenario assumes that the industrial countries leave their policies broadly unaltered and a "high" or "low" case assumes that they would change in accordance with a number of specified criteria, such as reducing payments imbalances. The World Bank is also involved in the development of "leading indicators" designed especially for monitoring world trade developments. They are based on correlated economic series intended to predict turning-points in production and trade cycles. The World Bank uses short-term forecasting models in connection with the preparation of its Outlooks. A three-year programme is under way to improve the forecasting performance of the developing country modules of a global model. The new model, called BANK-GEM, is being developed to link country models through trade and financial flows in order to analyse North-South interdependence. This system will have a model for 90 individual developing countries, each with a fully specified supply side. The new generation of models will be used for the International Bank for Reconstruction and Development's planning assumptions, scenario work for different users within the World Bank, in particular, staff concerned with the World Development Report, and the Long-term Outlook paper. The latter is a part of a new line of research which will focus on major economic currents in the global economy and their possible long-term consequences for growth performance of developing countries as well as major industrial economies.

37. The International Monetary Fund (IMF) uses a variety of approaches when preparing its projections. In part, they are the product of an interdepartmental review which draws on information the staff gathers through regular and special consultations with members countries. Econometric modelling techniques are used to simulate the medium-term effects of economic policies on baseline trends. A main purpose of the Fund exercise is to assess the impact of policies on outcomes, and major emphasis is placed on constructing scenarios corresponding to alternative policy stances. In preparing these scenarios, attention is given to the mutual consistency of country and regional results to the assumed global economic environment and the resulting growth of world economic activity, as well as international trade and its implications for the global financial environment.

38. Models used by the Economic Commission for Africa (ECA) have projected macro-economic trends. Exports were a function of market demand, while imports were determined by domestic variables. A new generation of econometric models are being developed to incorporate social welfare variables and economic indicators into the model's structure through the use of social accounting matrices. In this way, policies which impact upon income distribution and other poverty indicators can be examined. Attempts have also been made to incorporate specific features of African countries and to stress supply-side relationships.

39. The Economic and Social Commission for Asia and the Pacific (ESCAP) has constructed short- to medium-term models for 12 countries in its region. In

addition to allowing for the study of individual country trends, these models have been developed for use in Project LINK. Although each model is different, reflecting the particular characteristics and problems of the economy being studied, their main focus is on demand-side relationships.

40. The Economic and Social Commission for Western Asia (ESCWA) has developed a set of country models, which are referred to as the System of Macroeconomic Planning Models. The system is designed to evaluate the prospects for economic growth under alternative development scenarios. They allow quantifying the impact of alternative investment programmes on economic growth. Models for oil-exporting countries have been used to analyse the impact of declining oil prices on the economic prospects for these countries and the multiplier effects of government expenditure on GDP.

41. The Economic Commission for Europe (ECE) maintains a linked system of regional simulation exploratory models (SEM) as a quantitative framework for analysing long-term growth scenarios for ECE countries. The system was used as a simulation tool in the preparation of its Overall Economic Perspective reports. Scenarios in the studies are defined in terms of the availability of resources and expected allocation of factors of production. The system is conceived as an open framework which can be adjusted and broadened in the light of new data and changing problems to be studied. The system is composed of models for North America, the European market economies and the economies of Eastern Europe and the Soviet Union. They are linked together and to the rest of the world through a world model which also considers three other regional groupings. With respect to future activities, the international relations component of the model will be expanded to include a more detailed analysis of services activities and financial flows. The household consumption and investment models are also expected to be reformulated.

42. The Economic Commission for Latin America and the Caribbean (ECLAC) has operational models based on summary national accounts tables for 19 countries in the region. The models are flexible in design and can be used to study trends from 1 to 10 years. They project main categories of final demand and include a trade module with detailed coverage of the balance of payments on current account. The models are particularly suited for studying the external debt problems of the countries in the region. Alternative scenarios focusing on implications of different interest rates and trade possibilities can be elaborated, and key debt indicators may be computed. Simulations prepared with the models are used for evaluating proposed solutions to the problems of indebtness and inadequate external financing as well as for monitoring the implications for current and emerging trends.

43. World Population Prospects is a recurring publication of long-term projections of total population and its structure by age and sex for the world, its main regions and countries and territories prepared by the Department of International Economic and Social Affairs. Periodic assessments of world population are made in the form of quinquennial historical estimates and prospective projections corresponding to fertility assumptions. These projections, in turn, are used by the International Labour Organisation (ILO) to estimate and project the economically active population and its structure by age and sex.

44. Projections for the economically active population are prepared by ILO (now up to the year 2025) for all countries and territories with a population of more than 300,000 in 1980. These projections are consistent with the United Nations population estimates and projections. Attempts are being made to achieve similar consistency with the agricultural labour force data of FAO and the educational enrolment data of the United Nations Educational, Scientific and Cultural Organization (UNESCO). The methodology underlying the projections is under review in order to improve the quality of the data, in particular those corresponding to women.

45. Agricultural projections corresponding to the production of major crops to the year 2000 and the problems likely to arise, agricultural research needed and investment requirements have been prepared by FAO. Forestry and fisheries are similarly analysed based on data up to the mid-1980s, and their supply and demand are projected to the year 2000. Considerable emphasis is placed on issues relevant for world agricultural trade, for example, trade liberalization, benefits and costs to developing countries; effects of GATT negotiations; market stabilization; the linkages between the agricultural sector and the rest of economy; and the linkages between technology and ecology.

46. Industrial projections are prepared by the United Nations Industrial Development Organization (UNIDO) on the basis of its Short-Term Economic Projection model (STEP), which provides the general framework for forecasting industrial activity. The model projects trends in gross national product (GNP) allowing for incorporating a priori forecasts for selected countries and/or regions. STEP then provides a means to ensure that when such forecasts are used for a sub-set of countries, the forecasts for the rest of the countries are consistent with the judgemental forecasts. The trend in manufacturing value-added is forecast with a separate module which takes GNP projections as given. The most important input in the preparation of the yearly forecast comes out of the annual forecasting workshop, which brings together experts from each of the world's regions.

IV. COMPILATION OF STATISTICAL DATA ON WORLD ECONOMIC DEVELOPMENTS

47. United Nations organizations collect, process and disseminate vast amounts of information when monitoring and analysing trends and conditions at the national, regional and global levels. Much of the data are stored in machine-readable files which are exchanged regularly among agencies.

48. The Statistical Office of the United Nations Secretariat collects and disseminates a wide variety of primary statistics from country reporting sources. In addition, the Office is engaged in the development and improvement of statistics in terms of their timeliness, quality, scope and coverage, usefulness, comparability and accessibility. The latest available statistics are published in the Monthly Bulletin of Statistics, while more detailed data are contained in annual statistical compendiums on separate subjects. The Monthly Bulletin of Statistics is particularly useful since it has a short lead time in data collection and publication. In principle, statistics can be issued in the Bulletin within three months of their availability in countries. World Statistics in Brief is

published annually. The Compendium of Statistics and Indicators on the Situation of Women 1986 and the Compendium of Social Statistics and Indicators 1987 are examples of the varied social statistics disseminated by the Office. Primary statistics collected by the Office are also circulated in machine-readable form.

49. Information collected by the Statistical Office form the basis on which more directly usable development indicators are prepared for analysis and modelling. Within the Department of International Economic and Social Affairs, the Office for Development Research and Policy Analysis supplements and processes the primary data collected by the Statistical Office on national accounts and commodity trade to arrive at more complete and updated data sets essential for the analysis of world economic and social developments. These data underlie studies on long-term economic developments prepared by the Office for Development Research and Policy Analysis and are key statistical inputs into the various econometric models maintained by the Department and other agencies. A large-scale data base on world economic and social trends developed in the Office contains national accounts and commodity trade for all Member States. It is being expanded to encompass data relating to population, industrial production, energy, balance of payments, external debt and other variables. The standardized and updated sets of data are disseminated to other Secretariat units, regional commissions, and specialized agencies.

50. The Population Division of the Department of International Economic and Social Affairs provides up-to-date and internationally comparable estimates and projections of population and other major demographic variables for all countries, areas and regions of the world. The latest assessment, referred to as the 1988 revision, provides population estimates and projections for each quinquennial year or each quinquennial period of the 75 years between 1950 and 2025. Computer tapes of these data are distributed to ILO, FAO, UNESCO, the World Bank and other agencies.

51. UNCTAD maintains an Economic Time-Series Data Bank system (ETS) consisting of data on a wide variety of subjects relevant for the monitoring and analysis of trends in individual countries and composite world regions. Among the subjects covered are balance-of-payments statistics, financial statistics, commodity prices, national accounts, commodity trade statistics, demographic statistics, production statistics and energy statistics. Data appearing in the UNCTAD Handbook of Trade and Development Statistics and the Monthly Commodity Price Bulletin are derived from those in the ETS system. Data carried in ETS may be accessed and extracted in an on-line interactive computer system and are also disseminated in machine-readable form to other users.

52. Internationally comparable socio-economic indicators for individual countries are disseminated by the World Bank in its various editions of World Tables. The data are used by the Bank to analyse global trends, notably for the Bank's World Development Report and World Development Indicators. The data are also available in machine-readable form and are disseminated to agencies and the general public under the title Bank, Economic and Social Data. Discussions are under way with ECE to make these data available on-line to other United Nations organizations through the International Computing Centre (ICC) in Geneva. Social indicators compiled by

the Bank are published in its Social Indicators of Development. Given the critical importance of external debt in developing countries, there have been ongoing Bank efforts to improve the quality and coverage of debt statistics. The World Debt Tables cover detailed historical and current data on external debt of 111 developing countries.

53. The International Monetary Fund compiles, publishes and disseminates international statistics on all aspects of international and domestic finance. The monthly International Financial Statistics contains current data needed in the analysis of international payments, inflation and deflation and has country series on exchange rates, international liquidity, money and banking, international transactions, prices, production government finance interest rates and other items. Detailed presentations of current balance-of-payments statistics for 140 countries are published monthly by the Fund in its Balance of Payments Statistics. The Fund's monthly publication, Direction of Trade Statistics, provides data on the distribution by partner countries and by areas of countries' exports and imports. Government Financial Statistics provides detailed data on revenue, grants, expenditure, lending, financing, and debt of central governments and indicates the amounts represented by social security funds and extrabudgetary operations. Other information relating to State and local governments and information on institutional units of government are also provided. Many statistical publications are available in machine readable form.

54. Governments require a broad range of detailed statistics to furnish them with an overall view of the economic situation in their country. There are considerable differences between countries in the statistical infrastructures, and reliable, up-to-date detailed statistics are not available for many of them. In order to develop improved statistics in their regions, train national statistical services and provide for a regional framework of relevant statistical information for analytical purposes, the regional commissions have work programmes to promote standards and to compile, evaluate and disseminate more comprehensive, timely, reliable and comparable statistics in their regions. These data are published in regional statistical compendia and are included in regional Surveys. Data prepared by the regional commissions for analytical purposes are also disseminated to other agencies.

55. Two main statistical programmes are carried out by ILO for the monitoring and forecasting of labour issues on a world-wide basis. The first one relates to the preparation of comprehensive sets of estimates and projections of the economically active population on a country-by-country basis. These data, published in ILO Estimates and Projections of the Economically Active Population (1950-2025), provide unified data on the labour force for countries and territories with populations of more than 300,000 in 1980. The second programme is the regular collection and dissemination of statistical data on the size and composition of the labour force and employed persons, wages, hours and working conditions. Improvements are being made on the presentation of the data and on alternative means of dissemination, in terms of floppy disks, on-line systems and computer tapes. In addition, ILO has developed a microcomputer data base of labour market indicators for developing countries, compiles available estimates of the incidence of rural poverty in developing countries, and analyses indicators of poverty and

the labour market. The latter includes improving methods for measuring poverty, techniques for the rapid assessment of poverty changes, the development of leading indicators of employment changes in middle-income developing countries and the study of formal-informal sector linkages.

56. The Food and Agriculture Organization of the United Nations compiles and maintains data banks on agriculture, fisheries, forestry, rural development and nutrition. In September 1988, FAO decided to create a World Agricultural Information Centre (WAICENT) to bring together its major statistical data bases (FAOSTAT), as well as selected text information. A main purpose of FAOSTAT is to offer users easier and more efficient access to FAO data and increased interpretation of the data and its quality. Within FAO, FAOSTAT is expected to streamline and harmonize the process of data compilation, validation and dissemination. Plans call for work on FAOSTAT to be completed at the end of 1991. On an experimental basis on-line access to FAO data bases was granted to several international and intergovernmental organizations, as well as to ministries of agriculture in a few member countries.

57. The United Nations Industrial Development Organization maintains computerized data bases relevant for monitoring trends in economic activity and industrial development. An Input-Output Tables Database, published by UNIDO, is used in analytical work on structural aspects of industrial development and contains data for some 82 countries. Over 221 of these tables are stored in machine-readable form, and others are available in printed form. The UNIDO Country Time-Series Database is used in preparing forecasts for the UNIDO global report. The objective of this data base is to provide the most current information on key economic indicators. A third machine-readable data base, the UNIDO Industrial Statistics Database, has the objective of achieving, at the three-digit level, the greatest possible country coverage. Software and documentation provide easy access to the data for use in UNIDO studies of industrial development.

58. Obtaining timely and reliable data for the derivation of child-related indicators requires the use of suitable measurement tools. The United Nations Children's Fund's Middle East and North Africa regional office has adapted existing demographic measurement techniques to rapidly estimate recent trends in infant and under five years mortality in Syria and Djibouti. As an output from this work, a manual for data collection, estimation and processing, is being used for mortality monitoring in other countries. For several years UNICEF has supported the National Household Survey Capability Programme as a means of building or improving national multi-purpose household survey systems. However considerable time is required for building this capacity, and in order to obtain data in the intervening time period, other systems have to be used. UNICEF has supported the addition of a nutritional status module on some demographic and health surveys, and the addition of a mortality module to immunization coverage surveys.

59. The United Nations Environment Programme prepares data analysis and reports relevant to the preparation of major reports on world economic development and provides data on various aspects of environmental pollution, natural resources, population and settlements, human health, energy, transport, wastes and natural disaster. UNEP monitors and assesses various environmental parameters through its

Global Environmental Monitoring System (GEMS). GEMS is a large and growing computer-based system designed to make the information useful to the world community, individual Governments and other decision makers. GEMS works closely with FAO, WMO, UNDRO and other bodies of the United Nations system.

60. The United Nations Centre for Human Settlements (Habitat) exchanges data on an ad hoc basis with other agencies but hopes that these exchanges will become a routine procedure when new hardware and software are installed at its headquarters. Habitat has access to the United Nations Headquarters computer, which will enable it to improve the timeliness of information exchange between Habitat and the Statistical Office and Population Division. In the period 1990-1991, Habitat will disseminate in-house-developed microcomputer software with up-to-date statistics on human settlements.

V. EXCHANGE OF INFORMATION ON WORLD ECONOMIC DEVELOPMENTS

61. Agencies and bodies of the United Nations system have developed networks and mechanisms for the exchange of information on world economic developments. Economic and social research and policy issues are discussed regularly in various meetings. The rapid growth of quantitative methods of analysis over the last few decades has led to a consequent increase in the collection, use and exchange of data in computerized formats and a need to promote analysis and forecasting activities at the national level. Statistical data in machine-readable formats have become increasingly available to users as reliance on mainframe computer tapes has lessened and storage on microcomputer diskettes and CD-ROM media has increased. These rapid changes in technology have created a need for standards and guidelines for the exchange of information, with the United Nations system and between the United Nations and national centres. To this end, the Advisory Committee for the Co-ordination of Information Systems (ACCIS) was established as an inter-agency body to facilitate access by Member States to United Nations information and promote the improvement of the information system infrastructure of the organizations of the United Nations system. ACCIS has prepared directories and guides to United Nations information sources and promoted common standards for gaining access to United Nations data bases.

A. Regular meetings on analysis and forecasting activities

62. Units and organizations of the United Nations system engaged in economic and social research and policy analysis meet regularly to discuss questions related to activities in this field. The Director-General for Development and International Economic Co-operation chairs biannual meetings of senior officials of the United Nations Secretariat concerned with economic and social questions and annual meetings of executive secretaries of the regional commissions provide opportunities for discussions to review work programmes, including those relating to the analysis and forecasting of world economic developments. Meetings of the Economic and Social Council, the Committee for Development Planning and Project LINK provide an opportunity for intensive consultations among representatives of agencies engaged in the monitoring and analysis of world economic developments. Matters relating to

the identification of emerging economic developments, the preparation of reports and the exchange of information among agencies are also discussed at meetings of the ACC Task Force on Long-Term Development Objectives and its Technical Group.

B. Regular exchange of statistical data

63. Large volumes of primary statistical data are collected by United Nations organizations and made available to other agencies and the general public. Most of this information is collected on the basis of questionnaires for publication in the various statistical compendia issued by agencies. Often the published data are also available in a variety of machine-readable media, including mainframe tapes and personal computer micro-diskettes. In addition to collecting primary statistics, many agencies are producers of processed statistical data for use in analytical and forecasting exercises which are extensively exchanged among agencies, but frequently with the understanding thay they will not be released to secondary parties.

C. Analysis and forecasting activities at the national level

64. Technical co-operation activities carried out by agencies of the United Nations system at both the central and regional levels provide a wide range of expertise and training to developing countries relevant to the analysis and forecasting of economic and social developments at the multinational and national levels. Included in these activities are efforts directed at strengthening the technical and institutional capabilities of developing countries to prepare and implement integrated policies and plans aimed at accelerating and enhancing their economic and social development. The United Nations advises on specific issues involved in early identification exercises, such as planning methods and practice, fluctuation analysis, forecasting and quantitative techniques, as well as strengthening national statistical systems, particularly through the provision of more reliable and timely data required by policy makers, and the introduction of modern data processing technology.

D. Development Information System

65. The Development Information System (DIS) is a computerized data base of references to material written by or for the United Nations in the field of economic and social development. Its purpose is to provide rapid access to the studies, mission reports and project reports generated by the Department of International Economic and Social Affairs, the Department of Technical Co-operation for Development and other offices of the United Nations. The information contained therein can be used more effectively by institutions active in the field of economic and social development. The system provides on-line retrieval services and regular or special printed output. The main printed product of DIS is Development Information Abstracts.

E. Directories of data bases

66. Several directories of United Nations data bases and information systems have been prepared to serve as a guide to users interested in gaining access to them. ACCIS periodically publishes a Directory of United Nations Databases and Information Systems. This guide provides a detailed description of information systems, services and data bases available in the United Nations system, thus facilitating access by Member States to United Nations information and to promote the improvement of the information infrastructure within the United Nations system. The Technical Working Group on Statistical Data Bases of the ACC Sub-Committee on Statistical Activities has prepared an inventory, Computerized Statistical Data Bases. This publication, updated periodically, provides a comprehensive listing of the main computerized sets of available data maintained by agencies. Included in the inventory is information about subject areas, size of the data base, access keys to the data, period covered and frequency of its updating.

F. Promotion of data base access standards

67. ACCIS has promoted the dissemination of United Nations data bases to the wider public through on-line services and other means. Its Technical Panel on Data Base Access has reviewed current trends in the field of data base access and considered guidelines for the dissemination of information produced by the United Nations in machine-readable form. The ACCIS Steering Committee, however, decided that the production of guidelines for the United Nations system was an unrealistic goal. The Technical Panel was requested instead to prepare a compendium of existing data base access policies and identify the issues to be considered in framing data base access policies and practices. This report, entitled Providing Access to United Nations Databases: A Guide for United Nations Database Producers, was published in 1988.

G. Joint programming in human development

68. UNDP, UNICEF and the United Nations Office at Vienna (UNOV) have joined together to assist Governments, upon request, in human development programming. A UNDP/UNICEF/UNOV Steering Committee has been formed whose main purpose will be to help make countries' human development concerns operational, for example, by helping to formulate a realistic 10-year strategy, identifying necessary measures to be taken, various options for restructuring budgets and resource requirements. The programming initiatives will place strong emphasis on host country involvement. A team of international experts will be asked to assist and make recommendations, and collaboration with the full United Nations system is planned. A UNDP research programme will be implemented partly through joint studies with interested agencies and researchers; it will draw on the results of other efforts by United Nations agencies and bodies concerned with human development issues, as well as efforts of other multilateral and bilateral donors and those of Governments themselves.

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GENERAL DISCUSSION OF INTERNATIONAL ECONOMIC AND SOCIAL POLICY INCLUDING REGIONAL AND SECTORAL DEVELOPMENTS

Proposals to improve the work of the United Nations in the early identification, analysis and forecasting of world economic developments

Report of the Secretary-General

Corrigendum

Paragraph 19

After Proposal 6 insert the following subparagraph:

Proposal 7. To improve the timeliness of data used in the monitoring of world economic developments, offices engaged in the collection of primary statistics should consider allowing agencies direct, on-line access to their public files of basic statistics through enhanced communication facilities. Appropriate conditions of use, reimbursement of costs of access services and legal issues related to restrictions on the use of data bases by non-producers should be discussed by the Technical Working Group on Statistical Data Bases.

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